FRIENDS' INTELLIGENCER.

"TAKE FAST HOLD OF INSTRUCTION; LET HER NOT GO; KEEP HER; FOR SHE IS THY LIFE."

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AGENTS.—Joseph S. Cohu, Joseph T. McDowell, *New York*.
Benj. Stratton, *Richmond, Ind.*

LIFE AND RELIGIOUS EXERCISES OF JANE PEARSON.

(Continued from page 291.)

20th of 11th month, 1796.—I have felt a desire this morning to be thoroughly washed, until I be made clean; so as no fuller on earth could make more white. Many are made willing to bear the spiritual baptisms, provided they are assured it is Jesus that is dipping them. But so uncertain and seemingly casual are the occasions of their plungings, they believe not that He is the author of their immersion; or that it is his holy hand that is washing and bathing them for their imperfections. Sin being mercifully done away, how can these that are dead to sin, live any longer in it?

8d month 28th, 1797.—I was favored once more to attend our Quarterly Meeting at Carlisle, very near the place of my nativity, and the meeting I belonged to for many years. The meeting of ministers and elders was a favored season; I had the evidence of peace in my little labors; and indeed all the meetings were more or less owned with the heart-solacing presence of Zion's King. It was like taking my leave; and I was helped to be faithful: so that in my return, for many miles, my cup ran over, and I seemed anointed with the oil of gladness. Great was my peace; such a full foretaste of heavenly joy as I had not before experienced, except when I first opened my mouth in testimony. There seemed nothing betwixt my soul and its blessed Redeemer. At that time my joy was so full that I did long to be dissolved, feeling nothing but purity and holiness about me; or at least I had the sense of full acceptance with the Father, in my endeavors to obey.

At Carlisle I felt an engagement to supplicate God on behalf of the people: oh! I felt love for them; and some of the elders and ministers were near my best life. Indeed I had never found more openness to plead with them, than in the select opportunity for ministers and elders; and had great peace in so doing. In the time of supplication, which was at the close of the last meeting, I thought I found near access to the Almighty; which if I had not, I durst not vocally have called upon his ever blessed and worthy name. During the awful and solemn season (it was so to me), I supported myself on one knee, my other having no strength in it, which hindered my continuing so long in intercession as might have tended to my solid comfort. But the Almighty heard the little, who accepts the "Abba, Father." It was once the case with me before, at a little meeting nigh Bristol. My knees became unable to support me. I had nigh fallen down. I then thought it was owing to the oak boards with which the gallery (if I remember right) was laid, and to nothing being at hand suitable for my feeble limbs to bend upon. But though the rise of the power might be obstructed through the infirmity of the body, as to my particular, yet I believe my effort was accepted; and if I had but bent my knees, and called upon his ever worthy name, he being the author, would, in return for this humiliating dedication, have given the answer of peace. Blessed be the name of the Lord for ever.

4th month 27th, 1798.—I had a precious morning dream: I beheld a middle-aged grave matron. It may be I may live to see the fulfilment of this morning prospect, and hear the angelic declaration from her lips, which was the most comforting perhaps that I have received. This, however, is hid from me. On her approaching me, I thought, in the authority of truth, she addressed me as one of the heavenly family or household, intrusted with some weighty cares in it: and having my assignment or office as a domestic in the family; to give, as abilitated, meat

in due season to these amongst whom my lot was cast.

I told her I feared I had come short of this; and it is likely I had not the sense of full approbation, from this fear being suggested; which I shall ever remember with awe. She endeavored to allay my fears, by letting me know she hoped I was not blameable, or under Divine condemnation on this account. Now this is the true substance of my dream; but as two days have elapsed before I made this minute, these may not be the identical words.

4*th month*, 1800.—I have been confined of late through bodily indisposition, the fore part of which sickness was extreme. It appeared to me, as it might do to others, that I was making quick advances towards the grave; although, as I apprehended, the first Divine impression was, that I should not die at that time. But as I knew a recent instance of a minister of my acquaintance, and with whom I had travelled, whose dissolution was entirely hid from her, this made me sometimes rather hesitate.

I had much bodily illness, but not much conflict of mind. Oh! I was preserved still and quiet, which was not my nature; it was God's mercy. To his praise be it inscribed upon my heart as long as I live. I was favored with a fixed, steady, comfortable hope, that if I then died, it would be well with me. I seek no more evidence when I shall really surrender life; for it seemed as if my dear Redeemer's arms enfolded or inclosed me very safely; so that the wicked one, whom I had often been distressed by on a sick bed, touched me not, neither had any power over me.

First-day, 10*th of* 5*th month*, 1801.—I was at meeting at Whitehaven, and had a precious opening, with which I was nearly ready to stand up; but I am too much like the impotent man at the pool, waiting for the moving of the waters, and while I am making ready another steps in. It was so this day, and though it was but a few words, and not distinctly heard by me, yet it left unspeakable anguish and bitterness of spirit, so that the daughter of Judah, for the remainder of the day, "was trodden as in a wine press." I often mourn that I cannot leave others to their own master: but my gift is such, that when any thing is offered, by any which is not the King's currency, I cannot step one step after them.

9*th month*, 1801.—As in me there has been a singular instance of God's mercy and power, his mercy in forgiving, and power in upholding me, I can therefore do no less than praise Him here and eternally. And whoever reads this, let them be humbled in the dust before Him: for truly He is glorious in holiness, fearful in praises, doing wonders.

The latter part of this year I have had a time of confinement through sickness, and have not been so favored in this season of weakness, with that soul-sustaining evidence of Divine regard, as at some former times. It may be, that I had too frequent recourse to the redundancy of favor, then mercifully vouchsafed: not doubting but if I was similarly tried, I might be equally supported; and so was in danger of being like Gideon, who after his great achievement made an Ephod, and idolizing it, the same became a snare unto him.

6*th month* 30*th*, 1802.—I was at our week-day meeting, and was favored with a solemn silence, resembling that in Heaven, where angels and archangels adore in profound silence. Oh! I saw into the joys thereof; a place where sorrow cannot come: none of the inhabitants have any affliction. I was this day favored to partake of the most substantial sustenance of Divine good, that perhaps I ever experienced; the heavenly bread was handed to my soul, in no sparing portion, with: "Take, eat, this is my body."

Towards the latter end of the last year, 1801, I had an apprehension that I must visit some of the southern counties, or the south eastern. It came, I thought, with considerable clearness. I endeavored to keep as near to good as possible, and rarely, when awake, was without some sense of the Divine rejoicings. The latter end of the 5th month, 1802, seemed the right time for me to move in it. I did not stagger at my own weak state, for I was really given up; nor at the extreme weakness my only surviving child was then in; so that it really appeared like Abraham's trial in stretching out his hand.

My poor grand-children, that indeed were orphans, I wholly resigned, not daring to let the affectionate part take hold; but gave up my own life and theirs, and all that I had into the hands of the Almighty; not daring to draw back one jot, or even wish that the service had not been required of me.

I dared no more dispute the voice than Abraham did, when he was called to go to the land of Moriah; my nature perhaps recoiled, as his might do, without the hope that he had: "My son, the Lord will provide himself an offering." Let the unbelievers step forward and question these and other sacred truths; it matters not; their unbelief will perish with them, and cease to be propagated when they are no more.

But to return to my own concern. When the time arrived in which I was to prepare for the journey, the prospect entirely closed, and I was fully released. I bowed in humility, and accepted my discharge, with this caution, to eye the great Leader, and not hastily to re-enter into my family affairs; but to be still and wait, without rejoicing at my liberation; since which time I have continued to feel set at liberty.

4*th month* 12*th*, 1803.—This morning, before I rose, I was pondering in my mind, that divers

in our Society are rich and full, as may be seen by their way of living and their clothing; and that though their garb is plain, yet it is costly; and various are their suits of apparel. I then recurred to my own low estate, not regretting that it was so: for it became a redeemed people to be exemplary in eating, drinking, and apparel; in which revolvings my poor weak body and low mind were thus satisfied: "I will clothe thee with salvation, and crown thy end with peace."

Could I ask more for myself? Surely, nay! so that favored and broken under it, and very near the throne of grace, I was allowed, in humility, to petition for my daughter, that she might have a place in the kingdom of Heaven, and accompany my spirit in the mansion seen meet for me to inherit, when I was unclothed of mortality: after this I prayed for my grandchildren.

(To be continued.)

For Friends' Intelligencer.

A word of exhortation in gospel love to the members of the Society of Friends wherever these may come: "Stand fast, dearly beloved, and be not soon shaken in mind." Let not the instability and changeableness of the things of this world wrest you away from the foundation that stands sure, nor the commotions of these troublous times, in any degree, shake your confidence in the guardian care of our Father in heaven, extended at all times over his children. Be not disheartened when trials come, for "greater is He that is in you, than he that is in the world." Though the might of His power may seem to be hidden from you in the straits and difficulties that surround you and hedge you in on every side, yet, in the midst of all these, as you turn to him in the spirit of prayer, he will show himself to be on your side, and enable you "to stand fast in the liberty wherewith Christ hath made you free," by furnishing the spirit of endurance where endurance is necessary, and forbearance, where this great virtue is called for, because of intrusions and oppressions that fall very heavily upon some. May the spirit that ruled in the holy Jesus rule in all his followers—the wisdom, power and grace of his Father in heaven, which enabled him to stand fast in obedience under all the assaults of wicked men, submitting to be reviled, spit upon, and crowned with thorns; yet He threatened not, nor reviled again, but committed all things to a righteous Judge.

Trials of an extraordinary character test our principles and prove our stability, whether we will abide the furnace of affliction and stand true as valiants in the support of those testimonies that go to bless mankind, and establish peace on earth and good will to all; though by so doing we have to suffer the loss of this world's goods, and, it may be, life and liberty. Yet all these sacrifices have been made by very many in former days. To such, in all time, will the language apply—"To you it is given, not only to believe on the Lord Jesus Christ, but to suffer for his sake," thus raising a standard bearing the insignia of "Peace, peace to those that are afar off, and peace to those that are near," thus insuring the favor of heaven, with the answer of well done, in the final consummation of all things here.

S. H.

For Friends' Intelligencer.

GLIMPSES OF SCIENCE.—NO. XIV.

BY YARDLEY TAYLOR.

The superincumbent weight on beds of coal, particularly those located deep in the earth, must be tremendous, and as all organic matter seems to be destined to be undergoing changes, such a result need not be wondered at. We find coal of all grades, from the finest anthracite up through semi-bituminous, cannel, and bituminous of different degrees of hardness, to lignite, evidently of more recent origin than the others. In excavating for the railroad between Baltimore and Washington, beds of lignite were found from one to three feet in thickness, and apparently composed of trunks of trees lying in a parallel direction, and so far converted into coal as to admit of being used in the smith's fire, but was not a good article for the purpose. Many of the pieces so far retained their form and texture as to make it pretty certain that the variety of wood could be recognized. Here, probably, the pressure had not been great enough, nor the time long enough to fully carbonize the mass.

Since the success in many localities has been so great in boring for oil, it will be an interesting inquiry, and one in which geology will be called in to aid, to know where to bore with a prospect of success. No doubt many will make the attempt without due investigation, and many may fail, but it would be well for all to study the probability of success before venturing too far. If I understand it aright, these oil springs are below the beds of coal, and as the oil slowly exudes from the coal, would naturally fill up and saturate the strata beneath the coal beds, and when the cavities of these strata were filled up (as all strata have cavities more or less), the oil would rise and flow out at some low point. Thus the cavities in the strata may be filled with oil over a large extent of country, and by penetrating this strata any where, it will be likely that oil may be found by going deep enough, but as there is a slight dip in the coal beds generally, the largest quantity may be expected at the lower part of the beds, and here it seems likely that a drain may be had for a large scope

of country, and one that will rise to the surface, at least for a time. On higher grounds they would have to bore much deeper, and then would have to pump it up to get it to the surface. Another evidence of chemical action going on in the bowels of the earth, is the production of inflammable gas. We know that that is largely produced in our cities for purposes of illumination, and here it is found in connection with oil far beneath the coal beds. The probability would seem to be that it is derived from the oil that has descended and filled the cavities of the strata, and being confined there, it produces that energetic action, when these cavities are bored into, that sometimes occurs. We read of instances where the boring apparatus has been thrown out of the well to a great height, and a stream of gas issuing from the opening that, on taking fire, has illuminated the whole horizon for a great distance around.

An inquiry very naturally arises—will these wells continue to supply oil at the present rate for an indefinite time? It would seem to be a rational conclusion that they will not. The product may for a time increase over that at present obtained, but the conclusion seems to be irresistible that it has its limit. The quantity heretofore issuing from the oil springs would seem to indicate the rate of supply, and though we may have a very small conception of what has issued from the earth heretofore, we may safely conclude it falls far short of what is now barrelled up and conveyed away. Allowing this to be a fact, the quantity in the earth must be diminishing, and though this diminution may for a time hardly be perceptible, still it must be a fact, and a fact that in time will tell. Hence, those wells that are sunk on the lowest part of these reservoirs will hold out longest, as their supply reaches over a greater space.

How wonderfully we are provided with all things necessary for the convenience of man. Formerly we had tallow and whale oil for illuminating and for lubricating purposes. As our population increased and machinery was multiplied, it seemed as if there was likely to be a deficiency, as more exertion became necessary to procure a supply from the whale fishery, as that fish seemed to be diminishing in numbers. Then came the lard oil, a product that for a time seemed to yield a full supply, but this hardly kept pace with the increasing demand. Camphene and ethereal oil were brought forward for illumination, but these are dangerous compounds. Now comes coal oil, and that bids fair to give a supply for both purposes equal to the demand, at least for a time. The superiority of this for giving light for domestic purposes is so great, that it seems likely to take the place of all other compounds, and at a price that must bring it into general use. Its brilliancy is equal to gas, and its safety is one of its highest recommendations. As to the supply, we may conclude that, for a time at least, and it may be a long time, the oil from wells will be great, as there are doubtless places where oil may be found that now are not attempted, and if this should not be sufficient, there are beds of cannel coal, apparently almost without limit, that may be made to yield a supply.

We hear of oil being found at the foot of the Rocky Mountains, and in many other places. In India we read that oil has been for a long time found; the manner of obtaining it is to sink open wells into the earth and let the oil settle into them from the strata around. Could Yankee enterprise be admitted there, they might, by boring lower, greatly increase the supply. Coal seems to belong to every region of the earth; even the Arctic circle has its beds, and where there is a similar formation to that west of the Alleghanies, why may not oil be an accompanying product. It is probable that we need not look for oil in great quantity in the Alleghany Mountains; there the beds lie high up in mountains, they have been cut in two by rivers wearing their channels through them, which gives a discharge to any oil that may have been produced. Neither may we look for oil along the Ohio river below Pittsburg; there the beds lie high up in the hills; but where the beds come down near the level of the water or below, we may look with more confidence. Even if oil should be a product of anthracite coal, we need not expect to find it in the region of that mineral in Pennsylvania; as that section has been subjected to great dislocation and breaking up since the coal was deposited, this disturbance would open vents and fissures that would give vent to any beds of oil that might be forming.

From the Public Ledger.

HEALTH.

Given a sound constitution, health is proportionate to one's observance of the laws of nature. If these are violated, we must expect the penalty to follow as certainly as effect succeeds cause. Yet this principle seems to be almost universally disregarded. Physicians may be said to subsist upon the folly, rather than the physical infirmity of mankind. Their practice consists chiefly in curing those disorders of the human system which are induced by imprudence, while, if they were forced to depend for employment and fees on their professional service in such maladies as occur to a naturally healthy organism, duly preserved, they would have little to do and might starve. We frequently hear persons of intelligence complain, that they are tortured with headache, or dyspepsia, and the like, and wonder why they should be thus disturbed. But a little investigation as to their daily habits would not only show why their nerves are shaken or their

digestion impaired, but make it a marvel that they are alive at all. Indeed, when we consider what violence is done by a large majority of people to those conditions which are essential to health, it is amazing what an amount of abuse the human organization can endure. And another remark, suggested by the one just made, is, that the sound, wholesome state of body, which every individual so regrets when it is lost, is not more carefully guarded. We have seen men pursue for months, and even years, a course of life which they were well aware would, in the end, prostrate their strength, if it did not terminate more fatally; and yet, when the effect of their indiscretion was at last realized, they would manifest the extremest anxiety to recover that which they had just before thrown away with the utmost apparent heedlessness.

From Chambers' Journal

LAST NEWS FROM DR. LIVINGSTONE.

On the 10th March, 1858 the expedition to the Zambesi, under the command of Dr. Livingstone, left Liverpool in the screw-steamer *Pearl*, of two hundred tons burden, commanded by Captain Duncan, bound for Ceylon, but which had engaged to put us ashore at the mouth of the Zambesi. Our expedition consisted of Dr. Livingstone, Charles Livingstone Dr. Kirk, Commander Bedingfield, R. N., Thomas Baines, Richard Thornden, and myself, the engineer. We were accompanied by Mrs. Livingstone and her youngest child, a fine boy of six years of age. On the deck of the *Pearl* was securely placed our little steam-launch, in three compartments, all fitted and in readiness to be bolted together on our arrival at the mouth of the Zambesi. We arrived all safely at the Cape of Good Hope, towards the end of April; but having, on my late voyage home, been shipwrecked, and lost my Journal, I cannot now be certain of the correct dates. At the Cape, Mrs. Livingstone and her son left us, for the purpose of going with her father, the Rev. Mr. Moffat, to the missionary station at Kuraman. We left Simon's Bay on the 1st of May, and on the 15th, reached the mouth of the Zambesi, in lat. 18° long. 36° on the south-eastern coast, having steamed all the way.

My duties now commenced, and I immediately proceeded to get our launch out. This was a most anxious period for Dr. Livingstone; but as I had been planning during the whole voyage how we should get the launch over the ship's side, we lost no time, but at once erected a derrick, and succeeded in getting her safely into the water; and on the third day after, had steam up, and started in search of a navigable channel to the Zambesi.

Our first attempt was up the west Luabo, a distance of about fifty miles, which it took us three days to accomplish; and this apparent river terminated in a reedy marsh, where the mosquitoes were so plentiful and so hungry, that both my eyes were completely closed up in the morning; so we had nothing for it but about ship, and return to the *Pearl*. On reporting to Dr. Livingstone the failure of our search, he requested Captain Duncan to recross the bar, and attempt the Kongone. The *Pearl* then departed, leaving us in the launch, where we remained one week, until the arrival, outside the bar, of H. M. S. *Hermes*, Captain Gordon, which signalled us to come out, and enter the Kongone where we found the *Pearl* lying at anchor inside the bar.

On communicating with the *Pearl*, we found that Dr. Livingstone and Mr. Skede had gone up the Kongone in the *Hermes'* cutter. Next morning, we started in the launch, and after steaming about thirty miles up the river, met the cutter coming down, they having succeeded in finding a good navigable channel. We returned in company to the *Pearl*, which then proceeded up the river a distance of about forty miles; and finding she could not with safety proceed further, on account of the shallowness of the water, we started again in our launch in search of a suitable island—of which there are many—on which to erect our storehouse. After mature consideration, our commander decided upon one about thirty miles above where we had left the *Pearl*, and which was named Expedition Island. And now we proceeded to erect an iron house, which we had brought with us for the purpose of serving as a depot for our stores. It took us about four weeks to get all our stores safely conveyed up to the island and deposited in our storehouse.

The *Pearl* then left us to our own resources and proceeded on her voyage to Ceylon. Afterwards, our first step was to make out Mazoro, a Portuguese settlement, about fifteen miles further up the river. On arriving at this place, we found the natives at war with the Portuguese. They took us also in our launch for Portuguese, and were threatening to fire upon us, when Dr. Livingstone, without hesitation, at once went on shore, and having told them who we were, completely disarmed them, and made them our fast friends.

Dr. Livingstone being now certain that we were in the right river, and that there were no insurmountable obstacles between us and Tette, we returned to Expedition Island for a load of stores, which we purposed taking on to Sanna, a Portuguese town situated about fifty miles above Mazoro.

Steam being now up, we started at once for Supanga, where we arrived in safety about 5 P. M., and learned afterwards that the Portuguese had that day been defeated, losing all their stores. We now made several trips to and from Expedition Island, and got the most of our stores

removed to Supanga, Sanna, and Tette; but our vessel being small and slow, much valuable time was lost in these journeys. Dr. Livingstone was very anxious to get all this work over, and worked himself night and day in order to get us all out of the lower part of the river, where fevers are so common; and this he happily accomplished about the end of September, when we arrived for the first time at Tette, and Dr. Livingstone met the Makolo, whom he had left there two years before, and who had all remained there, in the firm belief that he would return.

The meeting was truly a happy one—the men rushing into the water up to their very necks in their eagerness once more to see their white father. Their joy was perfectly frantic. They seized the boat, and nearly upset it, and fairly carried the doctor ashore, singing all the time that their white father was alive again, their faith in whom was quite unshaken. On inquiry, we found that thirty of them had died from small pox, and six had been murdered by a drunken chief. They told us that they did not mourn for the thirty who had died, but that their hearts were bleeding for those who were murdered.

Up to this time, all the natives we had seen were slaves to Portuguese owners, with the exceptions of Dr. Livingstone's Makolo men, and the rebel party formerly mentioned, who were mostly runaway slaves fighting for their liberty under a chief named Mariana; and I have little doubt they would have succeeded in establishing their independence, had they been better provided with ammunition. I have since learned, from reliable sources, that about six hundred male and female prisoners, afterwards taken by the Portuguese, were by them sold as slaves to some other markets; and I myself saw a large party of them seemingly from four hundred to six hundred, on their way to the coast to be shipped.

After this, having with enormous labor and difficulty got our goods and stores into places of safety, and having found that our launch was insufficient for the purpose of further ascending the Zambesi, and Dr. Livingstone having written to her majesty's government, urging upon them to send out a more powerful steamer, he thought, while waiting replies from home, that instead of remaining idle, he would push up the Shire, which comes from the north, and joins the Zambesi about forty miles below Sanna. From this attempt, the Portuguese endeavored to dissuade us, stating that we should find it impassable, on account of the vast quantities of duck-weed with which they said it was covered. For a very short distance above its junction with the Zambesi we certainly met with considerable quantities, but not such as to stop us; and about three miles up, the river became perfectly clear, and we proceeded onwards, where not even the Portuguese had ever been, they having spoken from report only; after steaming about forty to fifty miles up this noble river, finding never less than two fathoms' water, and the banks of the river very fertile land, we reached the base of a large mountain, called by the natives Moramballa, whose summit is nearly four thousand feet above the level of the sea. The inhabitants of the country, from the mouth of the river up to this point, are the natives who acknowledge the leadership of Mariana, and who were most friendly to us. We stopped here one day, and a party of us ascended the mountain, and thence saw the Shire stretching far away northward, through a magnificent valley, nowhere under twenty miles in breadth, as far as the eye could reach.

Starting up the river next day to explore this great valley, we steamed about one hundred miles, which it took four days to accomplish, and reached a series of rapids, preventing further progress in that direction; these rapids Dr. Livingstone named the Murchison Falls. We landed at several villages each day, and found the natives very friendly to us, and living in the enjoyment of their own liberties, and perfectly uncontaminated by the slave-trade. At first, they were rather afraid that we meant to fight for the purpose of subjecting them to our power, but Dr. Livingstone soon obtained their entire confidence. We were told by them that the Shire flowed out of a lake named by them the Shirwa, but we could not at that time proceed further. Returning again to Tette, for the purpose of refitting, but with the intention of returning to endeavor to reach Lake Shirwa, we found our comrades all well, and rejoiced to see us.

After remaining at Tette for two or three weeks, I erected the small sugar-mill, saw-mill, and stationary steam-engine, which we brought from Glasgow, and got all ready for a start in the sugar-making and wood-cutting lines. Having been supplied with a quantity of sugar-canes by Major Sicard, we set to work expressing the juice, to the great delight of the natives. But the wonder of wonders was the steam engine and saw-mill, cutting the timber.

(To be continued.)

The child who privately does a thing for one parent, known to be contrary to the wishes of the other, and the parent who can counsel it, are equally guilty of a violence against domestic rule, which will not cease to bear the pernicious fruits of deception and discord to the latest hour of their lives.

If the seed of truth is in thy hand, sow it in any field which God provides for thee in his providence; and the least seed may become a great tree, whose fruit may feed many souls, and make glad thine own, here and hereafter, with exceeding joy.

From the British Quarterly Review.

ICELAND: ITS VOLCANOES, GEYSERS AND GLACIERS.

(Concluded from page 302.)

"Truly a wretched island!" many of us cosily situated Englishmen may be disposed to exclaim. It is a place where no corn is regularly produced, and in Madame Pfeiffer's time, only one bake-house existed in the country. The natives live chiefly on cod, and their principal beverage is milk; so that, should the fisheries prove bad, or the hay season unfavorable, a famine is almost certain to ensue. Unable to raise sufficient supplies, even for the scanty population, a war which should cripple their commerce for a few months, or simply cut off their imports of fishing-hooks, would reduce them to a state of lamentable destitution. There, if a peasant is ill, and needs a medical man, he may have to seek him at a distance of fifty, eighty, or one hundred miles; and in the winter it may be requisite to open a road, and pioneer for the doctor with shovels and pick-axes. If a man wishes to attend divine worship, he may have to ride many miles to a church, twenty or thirty feet in length, which is used as a lumber-house by the incumbent, and as an hotel by travellers, the latter spreading their beds on the floor, and sometimes taking their meals from the altar; and when service is performed, it will be by a well-educated clergyman, who considers himself passing rich on ten to two hundred florins a year, and who shoes horses or makes hay, whilst his lady milks cows and tends sheep.

But the Icelander will tell us that his country has some splendid negative advantages at the least. It has no forts, no soldiery, no policemen (worth mentioning), no custom-house officers, no income-tax gatherers, and happily for its peace (so the general public may say), no professional lawyers! Neither has it had a single executioner for some time past, for it is remarkable that no native could be found to undertake this odious duty; and consequently, it has been necessary to export malefactors to the mainland, in order that they might be despatched. He will tell us also,—such is the strong attachment which man naturally conceives for his native spot, however uncouth and ungenial—that, though his country is blistered with lava and blanched with snow, though its hills may be without verdure, and its valleys without corn, though its atmosphere reeks with sulphur, and its streams may flow from boiling fountains, though he walks on a nest of earthquakes and sleeps amongst a host of angry volcanoes, and though, to all appearance, his little island might at any moment be blown up into the air, or let down into the sea; yet after all, in his opinion, Iceland is the very "best spot on which the sun shines."

"Still, even here, content can spread a charm,
Redress the clime, and all its rage disarm.
Though poor the peasant's hut, his feasts though small,
He sees his little lot, the lot of all;
Sees no contiguous palace rear its head,
To shame the meanness of his humble shed;
No costly lord the sumptuous banquet deal,
To make him loathe his poor and scanty meal;
But calm, and bred in ignorance and toil,
Each wish contracting, fits him to the soil."

Just one point more. At the present moment Iceland possesses an additional feature of interest—one which may possibly render it of great service to the New World as well as the Old. The difficulties of laying an electric cable across the Atlantic, and of working it with the requisite vigor when laid, have made it expedient to break the length of the journey by establishing several intermediate posts. By fixing upon three stepping-stones, as it were, the ocean may certainly be overleaped by the galvanic fluid without much sense of resistance. Of these, Iceland must be one. We conclude by giving Commander Forbes' opinion on the subject, at the same time expressing our obligations to him for his lively and interesting work. It is sketchy in character, and scarcely fulfils the expectations which its title and appearance excite. Nor is the language at all eminent for its polish; but taking it as a sailor's narrative, purposely written with a free-and-easy pen, the reader will find much in its pages to entertain and instruct.

"The manifest advantages of a North Atlantic telegraph would be, that four electrical circuits would be obtained, none of greater length than six hundred miles; and as submarine telegraphs now working at greater lengths demonstrate the possibility of complete insulation and retardation up to that distance, whereas, when we get beyond the thousand miles, all is doubt and conjecture, to say nothing of the hazard attendant on the enterprise, and the advantage of having to relay a portion instead of the whole length of the line, in the event of a fracture, the superiority of this route cannot fail to command attention. The honor of originating the North Atlantic line belongs wholly to Colonel Shaffner, of the United States, who, in 1854, obtained a cession from the Danish government of exclusive telegraphic rights in the Faroes, Iceland, and Greenland. His proposed route is as follows: From Scotland to the Faroes, two hundred and fifty miles; from Faroes to Iceland, three hundred and fifty miles; from Iceland to Greenland, five hundred and fifty miles; from Greenland to the coast of Labrador, six hundred miles. Now with regard to the objections that may be advanced against this line, there are only two worthy of notice; namely, the icebergs of these northern coasts, and the submarine volcanic line of the south-western extreme of Iceland. The latter may be easily avoided by landing the cable on any of the many eligible spots between Portland and Cape Reykianœs, and thence carrying the

line across country to any part of Faxe Fiord All this portion of the coast is free from icebergs, and the shore-ice occasionally formed in the winter is inconsiderable; and besides, it has been already demonstrated in the Baltic and American lakes, that shore ice does not interfere with the workings of submarine lines. With regard to any local electrical difficulties to be surmounted, it must be remembered that, as far our present knowledge goes, they are only conjectural; and when it is added that the bottom in these regions is, for the most part, composed of sand and mud, and nowhere of a greater depth than two thousand fathoms,* the only wonder is that this North-about route was not first adopted."

FRIENDS' INTELLIGENCER.

PHILADELPHIA, SEVENTH MO. 27, 1861.

ERRATA.—In a communication in last number, signed L., N. Y., 7mo. 7th, page 297, first column, sixth line, read "pagans," instead of persons. On second column, same page and line, read "that" faculty instead of "what" faculty; and in quotation from Pope read, "All are but parts of one stupendous whole."

DIED, of dropsy, at the residence of her son, Nathaniel M. Dudley, near Moorestown, N. J., on the 8th of Sixth mo., 1861, ANNA DUDLEY, in the 76th year of her age; a member of Chester Monthly Meeting.

ON LEATHER.

Extracts from a Lecture delivered in London, by Edward Lankester, M. D., F. R. S.

I shall to-night draw your attention to the skins of animals. I pass over the use of horse hair, of human hair, of feathers, spines, hoofs and horns, all of which are epidermal appendages, and will now talk of the skin or substance out of which those epidermal appendages grow. I drew your attention to the epidermis in the last lecture, and stated that the skin was composed of these two parts, the epidermis and the dermis. The epidermis is a membrane composed of cells on the external surface of the dermis or true skin. This epidermis is continued in the animal into the mouth, and into the organs of respiration, but when we get into the interior organs, we call it, instead of a skin, the mucous membrane, and we find this mucous membrane is covered with scales. This mucous membrane is called the epithelium, and the scales are called epithelial scales. I only want to show you that the skin is continuous with the mucous membrane, and you may regard an animal as a sort of bag; when the internal organs are to be made, the skin is, as it were, tucked in. But we have nothing to do to-night with the internal organs or membranes, which are, however, used in the arts. I have only to call your attention to the skin itself. Now there is one point with regard to the epidermis which I want to allude to before I leave it. The epidermis gives the color to the animal, not only to the lower animals, but also to man. Sprinkled among the cells I have spoken of, you will find a quantity of polygonal cells called pigment cells, which give the color. When those pigment cells are absent we call the persons albinos, of which we are descendants; and when those cells are abundant, we call the persons blacks, and in proportion to the number of these cells is the color of the individual or the races of mankind. These cells are in that portion of the epidermis which forms the hair, and when the epidermis produces black cells, those black cells are formed in the hair as well as upon other parts of the skin, and thus we have black hair and white hair arising from the pigment in these cells. So with the lower animals; the black animals have these pigment cells, whilst the white animals are without them. Again, these cells are so constructed as to reflect a variety of colors, and so we have red animals, and the various kinds of brown produced by these pigment cells.

Now, passing from the epidermis, I come to the layer which lies below it. You see the importance of understanding thoroughly the structure of the skin to those who have to convert it into leather, and it is to the want of attention to the structure of the skin that a good deal of the backwardness of tanning in former years was due. Lately there has been an improvement in the process. I now call your attention to this under layer, which is the dermis. Now this is composed of a basement membrane, in which there are blood vessels. The cells, which are above, are produced by the agency of the blood vessels. We have arteries in one direction, and veins running out in the other, so that this thick part of the skin is supplied with blood vessels. That those blood vessels are present, we can see in the leather after it is tanned by the fibrinous condition of the leather.

Then we have in this skin, which is the organ of touch, a variety of nerves running from the spinal cord. These nerves run up into the papillæ of the skin, and give the power of receiving the impression from outward objects. The skin is then the organ of touch. Now, in addition to this, we have in the skin a number

* The expedition since employed to sound this line found much less depth of water than had been anticipated.

of glandular apertures, a series of little glands, which are called sebaceous glands, or sebaceous follicles. Those little glands are intended to secrete a quantity of matter which is constantly accumulating upon the skin, and which keeps the skin elastic; and it is those little glands which frequently get blocked up and form little black pimples on the face; and sometimes in these follicles you get an insect, the *acarus folliculorum*, and those are most often found in the side of the nose. But it is to the perspiratory glands to which I call your attention more particularly. They consist of a little tube which runs through a gland, which is well supplied with blood vessels, down to the thicker part of the skin. Now the great function of these glands is to draw nourishment from the blood, and they open by little pores into the skin, and if you look at any portion of the skin, the top of the thumb, for instance with a common magnifying glass, you will see that there are a series of lines and little pores, which pores are the terminations of these perspiratory ducts. Curious calculations have been made as to the number of these pores; thus Wilson states that there are 3528 in a single inch of the skin, so that in an ordinary sized body there are not less than 2,300,000 of these pores, and these tubes have a certain length, and it is calculated that there are not less than twenty-eight miles of this tubing. Now the great function of these glands is to keep the heat down. If it were not for that, we should get up to a higher temperature than 98°. You can easily understand how these glands act by placing a cloth over a tea-kettle, and wetting the cloth with cold water so as to keep the kettle at a given heat. In the same way the perspiration assists in keeping down the temperature of the body, and that is the function of this great mass of perspiratory glands. Thus you see that the skin is a very complicated organ. Now the chemical substance of which it is composed is principally that gelatine of which I have spoken before. This gelatine can easily be procured from all parts of the animals. We obtain it from the refuse of various manufacturing processes, the clippings of hides, the refuse of bones, and the tips of horns. Now the fact of its being present in the skin constitutes the foundation of the art which I am about to bring before you this evening. There could be no tanning if it was not for the presence of this gelatine. Now this gelatine has the properties which I mentioned in the first lecture, of being insoluble in cold water but soluble in hot water, so that we may take skins and put them into cold water for any time and they will not dissolve, but we can take these clippings of skins and dissolve them by heat, and when we evaporate the water we leave the gelatine behind. Now this gelatine is used for making size and glue, and it is also used for diet. We take sometimes even a coarse kind of leather, and boil it down and make it into gelatine, and then into jellies. This gelatine exists also in the sturgeon, and some other kinds of fish, under the form of isinglass. Now one remarkable property of gelatine is, that when it comes in contact with a substance which we know by the name of tannic acid it forms an insoluble precipitate. And here is a very remarkable thing, to be thought of for a moment, that two soluble substances, meeting together shall form an insoluble substance. If you add a little solution of tannic acid to a solution of this gelatine you will have a substance precipitated which we call tanno gelatine, which is exactly the substance formed by immersing a piece of skin in tannic acid. It is due then to this great fact of the presence of gelatine, that the whole of the manufacture of leather by means of tannic acid depends. But before I speak more particularly of tannic acid, I would just say this, that although when we boil skins and other parts we get this substance which we call gelatine, and which we separate, yet, there is no proof that this substance is contained in the skin or in the animal substance before it is boiled. Therefore it is wrong to say that leather is merely tannic acid and gelatine, because we do not boil the skin and convert it into gelatine when we make leather. I wanted to say that, to correct a general impression which might be conveyed when one talks of these tissues being composed of gelatine. Then of what are the tissues composed? Why they are composed of a gelatigenous substance which, if you put it into water, forms gelatine. I think I shall show you that we do not know everything about leather-making tonight, and it is not to be taken as a settled question that gelatine is the substance which we convert into leather in the way that the tannic acid and the gelatine mixed together produce an insoluble substance.

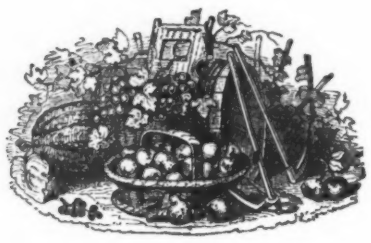
Now what is tannic acid? Tannic acid is a substance that Sir Humphry Davy discovered to be present in all barks and vegetable matters which have been employed by the tanner in converting skins into leather. He called it tannin; but as it is found not to be a neutral substance, but capable of combining with metals to form a class of salts called tannates, we call it tannic acid.

(To be continued.)

LIGHT AND HEALTH.

As an instance of the value of sunlight, Dupytren, the celebrated physician, mentions the case of a French lady, whose disease baffled the skill of the most eminent men. This lady resided in a dark room, in which the sun never shone, in one of the narrow streets of Paris. After a careful examination he was lead to refer her complaint to the absence of light, and caused her to be removed to a more cheerful situation; the

change was attended with the most beneficial results; all her complaints vanished. It is remarkable that Lavoisier, writing in the last century, should have placed light as an agent of health, even before pure air. In fact, where you can obtain abundance of light, it is also generally possible to obtain a similar change of fresh air. In England a similar thing occurs; invalids are almost always shut up in close rooms, curtains drawn, and light excluded, to their serious disadvantage. Sunlight is more vivifying than any physic.



SHORT PRESENT HINTS.

This is the season for budding fruit. The cherry, plum and peach grow as well from the bud as the graft.

Grafts set in the spring should be examined now; some of them will require re-waxing; and some, which have become top-heavy from a rapid growth and profuse foliage, should have a stick fastened to the stock and the graft tied. Frequently birds lighting on these bending grafts, break them or force them from their sockets, which this support will prevent.

Apple trees, whether sat out last spring, or two or three years back, should have the earth completely removed down to their roots and carefully searched for worms. A stout piece of wire is better than a knife to ferret out these destructive vermin. If the trees be completely protected against their ravages for the first four years, they may be regarded as pretty safe.

Caterpillars, thus far, this season, we believe, have not been so prevalent as customary. They are a great pest and a great eyesore. The best way to stop their spreading, and lessen their numbers in the succeeding year, is to keep a watchful eye, and as soon as a nest is forming remove it about mid-day.

Remove the old mulching around the young fruit trees, scratch the ground with an iron rake, and replace it with fresh. Don't forget the mulching for the raspberries and blackberries, as well as the currents and gooseberries.

Mow off the strawberry vines, and scatter them evenly over the bed. They serve as a protection to the roots against the scorching suns of July and August.

SEASONABLE FRUIT HINTS.

In the Horticultural Department of the *Farmer and Gardener*, for July, (conducted by William Saunders,) we find the following excellent counsel touching the cultivation of Fruit, which should be read and acted upon now. We may be permitted to say, however, that we prefer spring to fall for setting out strawberry beds, unless the variety be a strong grower and perfectly hardy.

Injudicious pruning has much to do with failures in fruit culture. Winter being a season of comparative leisure in gardening operations, it is taken advantage of to prune trees, and too frequently the trees are pruned whether they require it or not. The time to prune must depend on the condition of the tree and the object in view. If it is desired to envigor a weakly tree, then winter is the best time to prune, but to prune strong growing trees during winter, with the expectation that it will induce them to fruit, will lead to certain disappointment. Now is the time to manipulate such plants, and if the growths are checked by pinching out their extremities, and small branches removed if not required, there will be no occasion for touching the trees during winter. We are certain that, as knowledge of cutting fruits extends, and science recognised in its practical application, there will be less pruning; little if any sawing and chiseling in the orchard, but instead, the season of growth will be chosen for all necessary pruning and training.

The Gooseberry, Currant and the Raspberry, as well the Pear, Apple, Peach and Cherry, may be kept in the most perfect condition by due attention to the removal of small shoots, and checking the growth of strong ones, thinning and equalising growth. Raspberries should be looked over, and all superfluous shoots removed, leaving those only that are required for next crop; when the fruit is all gathered, the cause that produced it may be removed.

Strawberry plantations may be set as soon as young plants can be secured. If planted now they will become established before winter, and some varieties, such as Albany Seedling, will produce a fair crop next summer from plants set out thus early.—*Germantown Telegraph.*

GRAPES.

At a late meeting of the Horticultural Society held in Philadelphia, it was stated that an insect had been recently discovered, which had proven to possess considerable destructive powers when found among plants and flowers. It was stated that one pound of quassia, in five gallons of boiling water, would destroy the insect completely.

A discussion ensued as to the proper remedy to be applied to ward off the encroachments of insects in flower and other gardens.

Attention was drawn to the subject of mildew on vines. Very little of this dew had been noticed this year.

The Secretary, stated that mildew on grapes arose from an inherent defect in soil. Also, that in volcanic countries, grapes are never subject to mildew. In Italy, Greece, Asia Minor, Spain and all volcanic countries, the grape flourishes eminently because the soil is highly impregnated with sulphur, which is supposed to be a remedy for mildew. The experiment had been successfully tried. It was also stated that there were some foreign grapes in this city which are considerably mildewed.

He also referred to the fact that the grapes of Spain were allowed to trail on the ground, and a failure of a crop was almost an impossibility. The reason given for growing grapes upon the ground, was that moisture was needed where the atmosphere was dry.

FREAK OF THE FUNGI.

The fungus is a kindly friend, says the London *Athenæum*, and a fearful foe. We like him as a mushroom. We dread him as the dry rot. He may be preying on your roses, or eating through the corks of your claret. A fungus has eaten up the vine in Madeira; the potato in Ireland. A fungus may creep through your castle and leave it dust. A fungus may banquet on your fleets, and bury the payment of its feats in lime. Fungi are most at home upon holes of old trees, logs of wood, naked walls, pestilential wastes, old damp carpets, and other such things as men cast out from their own homes. They dwell also in damp wine cellars, much to the satisfaction of the wine merchant, when they hang about the walls in black, powdery tufts, and much to his dissatisfaction when a particular species, whose exact character is unknown, first attacks the corks of his wine bottles, destroying their texture, and at length impregnates the wine with such an unpleasant taste and odor as to render it unsaleable; more still to his dissatisfaction when another equally obscure species, after preying upon the corks, sends down branched threads into the precious liquid, and at length reduces it to a mere *caput mortuum*.

THE OLD COTTAGE CLOCK.

Oh! the old, old clock, of the household stock,
Was the brightest thing and neatest;
Its hands, though old, had a touch of gold,
And the chime rang still the sweetest.
'Twas a monitor, too, though its words were few,
Yet they lived, though nations altered;
And its voice, still strong, warned old and young,
When the voice of friendship faltered!
'Tick, tick,' it said—'quick, quick, to bed—
For ten I've given warning;
Up, up, and go, or else, you know,
You'll never rise *soon* in the morning!"

A friendly voice was that old, old clock,
As it stood in the corner smiling,
And blessed the time with a merry chime,
The wintry hours beguiling;
But a cross old voice was that tiresome clock,
As it called at daybreak boldly,
When the dawn looked gray o'er the misty way,
And the early air blew coldly;
'Tick, tick,' it said—'quick, out of bed,
For five I've given warning;
You'll never have health, you'll never get wealth,
Unless you're up in the morning!"

Still hourly the sound goes round and round,
With a tone that ceases never;
While tears are shed for the bright days fled,
And the old friends lost forever!
Its heart beats on, though hearts are gone
That warmer beat and younger;
Its hands still move—though hands we love
Are clasped on earth no longer!
'Tick, tick,' it said, 'to the church-yard bed,—
The grave hath given warning—
Up, up, and rise, and look to the skies,
And prepare for a heavenly morning!"

C. Swain.

I thought 'twas Thine to give me, and I craved
One blessing more than all on earth beside;
I asked it often, and I asked it long:
It was not sin, and yet it was denied.

Didst thou not hear the still repeated prayer?
Prayed I amiss, as if the due were mine;
Nor, simply resting on thy love, exclaimed
"Fulfil Thy promise, Lord, for I am Thine?"

Ah! foolish! He who from the ocean depth,
Through roaring waters, heard the prophet's prayer,
Who marks the first faint breathings of desire,
Can never deafen His paternal ear.

He heard me; yes! He listened and He heard,
And held the blessing in His own right hand;
Whatever barred me from the good I sought
Had sunk to nothing at His sole command.

He heard, and might have granted; but He marked
The secret reservation of the soul,
The wish that almost to itself unknown
Forbade the prayer that on the accent stole.

He marked the feeling that Himself inspired;
He knew the heart He moulded, and He knew
That while my lips the warm petition breathed,
I did not wish it, if *He wished not too.*

'Twas so, most Merciful! I did not say,
I loved Thy will more than the thing I sought;
I asked an earthly good, but Thou perceiv'dst,
Something *was* dearer, *though I said it not.*

Thou knew'st I would not have it, might it mar
The better bliss to which my hopes aspire;
And mercy yielding what Thy wisdom knew,
Denied the prayer, to grant me the desire.

CLOUDS AND SUNSHINE.

Not always fall of leaf, nor ever spring—
No endless night, nor yet eternal day;
The saddest bird a season finds to sing,
The roughest storm a calm may soon allay:
Thus, with succeeding turns, God tempereth all,
That man may hope to rise, yet fear to fall.

R. Southwell.

MY LITTLE TENANTS.

Perhaps I ought rather to call them squatters upon my property, for they neither pay me any rent for the abode they occupy, nor have they tendered any, though they have resided upon it for the last two years. The first information I received of their intention to settle was conveyed by the presence of waste building materials, of no great value certainly, for they consisted only of mud and straw. It will be perceived from this, that the intruders were very humble in their notions, and intended only to employ the same materials as the Ancient Britons once used to construct their habitations with.

On seeing these intimations of the presence of strangers on my property, I began to look about for the builders, and, having cunningly ensconced myself in a sung corner, I soon discovered them. They were a newly-wedded pair, remarkable for personal beauty, and an example to married couples generally; for they worked together, and were evidently of one mind in all they did. So prepossessing was the appearance of these young people that, in spite of their audacious intrusion, I could not find in my heart to disturb them by a notice to quit, but contented myself by keeping a strict watch on all their motions, that I might check a too intrusive disposition, should it display itself.

But soon every other feeling was absorbed in sympathy for the young architects, who were evidently inexperienced, and very unfortunate in the quality of their materials. The straw was all right enough; but alas! for the earth which should have formed the walls in combination therewith. The season was particularly dry, and the earthen walls, instead of adhering, as they ought to have done, crumbled and fell once and again, to the great dismay of the little builders, who were anxiously endeavoring to prepare for the advent of an anticipated family.

I suppose by this time, my readers will have guessed that I do not tell of unfeathered bipeds, but of a couple of newly-wedded swallows commencing housekeeping for the first time. The place they had chosen as the scene of their matrimonial cares and pleasures was an out-house, formerly used as a stable, with a door, of which the upper half was generally open. This out-building is now my coal-house, and, being rather spacious, serves also as a receptacle for my gardening tools and various odds and ends. On a shelf which runs along the side are deposited my empty flower pots and sundry invalided dishes, such as a housekeeper in town would cast aside as useless; for they would not be fit to place on a table, even were the leaks stopped with white paint, as is sometimes the custom with us thrifty country folk. Well, two years ago, amongst other matters, a cracked willow-pattern pie-dish was resting from its culinary services, and awaiting some more humble sphere of usefulness, on the shelf in the old stable. As I said before, my young builders were unlucky as regarded materials. In vain did they bring earth; in vain did they work and knead it with their dainty little beak-trowels. Their tiny mouths did not furnish sufficient moisture to supply the deficiency which the hot sun had caused. The walls would not stick, and I was filled with pity when I saw them suspend their labors and watch the crumbling ruin fall for the second time to the ground. They had found *me* out before this happened, and used to twist their pretty necks and peer curiously out of their bright eyes, to see if I were manifesting hostile intentions. But they soon became convinced of my pacific disposition, so far as they were concerned, and never ceased their labors on my account after the first three days.

When, a third time, their attempts to form a habitation proved abortive, I thought I should lose my new tenants, and that they would betake themselves to some locality where the clay was of a more suitable temper for their purpose. To my delight, however, I found they were too well satisfied with their landlady's treatment to leave her unceremoniously. They accordingly gave up all thoughts of building on the rafters, and took possession of my cracked pie-dish as a more suitable and convenient place.

But it must not be supposed they were satisfied to make no display of their architectural powers. Following the promptings of instinct, they brought pellets of earth, with which they duly plastered the bottom and sides of the dish—as a cook prepares hers for the reception of birds by lining it with dough. Then a beautifully-woven circlet of hay was placed upon the earth foundation, a lining of feathers added, and the habitation was ready for its tenants. Have any of my readers ever seen such little architects at work? I dare say there are but few who have never handled a bird's nest, and wondered at the amazing skill and beauty displayed in the work of these heaven-taught builders. But in the great towns and cities, people have neither leisure nor opportunity to mark the way in which the wondrous structures are put together. I wished that every lover of nature, and of nature's God, could have seen my little tenants choosing their place of abode, then coming with their tiny bills full, the one of clay the other of straw. How rapid was the motion of the beak as it worked the clay, reminding one of the apothecary tempering the material for pills on a marble slab. My swallows deposited their clay in roundish lumps about the size of a pill, then stuck a straw or two upon that, and again brought more pellets to make it adhere.

All the while the pie-dish nest was in preparation, the young couple roosted side by side upon the shelf; but as soon as it was completed, the

lady took possession, and during the process of incubation her lord reposed upon a long nail, which was in the wall at the opposite side of the stable. I used to peep into the dish every morning, and I saw five eggs deposited there one after another—such dainty little eggs, of a warmish creamy color, with light brown spots; so fragile-looking, too, that they seemed too delicate to be touched. But no profaning finger of marauding boy was ever allowed to poke itself into *my* pie, though doubtless many would have liked to have one there.

While the lady was diligently engaged in hatching her little family, the gentleman was apt to take advantage of her pre-occupation, and to stay out rather late at nights, reminding one of the human husband under similar circumstances. Even as the unfeathered male biped is apt to stay an hour or two later at his club when the house mother is away, so did my master swallow stay twittering on the roofs, and gossipping with his neighbors, until I was compelled to threaten that I would lock him out. I remonstrated with him by dint of rattling the stable door, and I thus managed to inform him that, being in the habit of going to bed early myself, I expected all dwellers under by roof to be in by half-past nine P. M. at the latest.

After clattering the door, I used to retire into the house for a minute or two, and on my return was pretty sure to find that my obedient gentleman had taken up his station on the nail, when I shut the pair in for the night. To his credit be it spoken, I never found it necessary to do more than remonstrate with my tenant, though I must own, until I saw for myself, I thought that swallows went to bed at an earlier hour than half after nine.

In about twenty days, five little gaping mouths might have been seen over the rim of the dish. The father and mother had a busy time of it then. It required all their industry and diligence to keep up such a continuous supply of food as would satisfy the little clamorers in the pie-dish. My motherly sympathies were stirred at the sight of the hard-working pair, and I thought I would help them. So I began fly-catching, and went with the poor fluttering insects to tender them to the baby swallows in the pie-dish. But no, thank you. My bribes and blandishments were of no avail. However widely the little beaks might be distended, they were always instantly and firmly closed against every dainty that I could offer. They would be fed only by their natural caterers.

It was curious to see how these five pairs of little legs were twisted and interlaced like a very piece of network; and the beautiful little heads were placed one over another when they slept, till we saw but a mass of young life rather than so many distinct creatures. As they grew, the dish became literally filled to overflowing—wanting only an upper crust, as I used to say, to complete the pie.

One afternoon, having a young friend with me who had, like myself, taken great interest in my tenants, I lifted down the dish, to take a better view of its contents. I had often done so before, without giving offence; but on this occasion I ventured further. I introduced my hand amongst the network of legs, and disentangled them, when, to my dismay, out scrambled the whole party, and fluttered off in various directions. What a clatter there was; doubled in an interest by the voices of the old birds, who indignantly remonstrated against this breach of contract.

My friend and I set to work, and, with due penitence and apologies, though not without much chasing and fluttering, succeeded in restoring four of the youngsters to their disconsolate parents. The fifth rather came to grief, and had his temper and feathers a good deal ruffled while scrambling in and out amongt the firewood in the corner of the stable. I should say that, though the most friendly relations and perfectly neighborly feelings existed between my tenants and myself, they never would feed their young in my presence. They would come with their bills full of insects, and wheel round and round, in and out; but I was always compelled to retire ere they would administer the rations to the impatient brood. It appears that, if *I* were not sufficiently well informed to abstain from intruding upon them at meal times, they were by no means disposed to permit such a breach of good manners. But when able to stand on the roof, I have often seen the young ones feed, always equitably in turn.

Soon after our unfortunate escapade with the youngsters, the parent couple began to teach their young to fly. Then we had a clamour indeed! Such twittering, such examples of aërial swallow gracefulness for ambitious juveniles to follow, until at last the whole party flew out in search of food together. I have been told by a friend of mine—a great lover of natural history—that after the young ones are able to fly, the parent birds continue to feed them thus. The old one, with laden bill, meets its offspring in the air, and, without checking the flight of either, the food is rapidly transferred to the beak of the young swallow; but I never, until to-day, was fortunate enough to see this pretty and graceful feat performed.

After my little feathered friends were able to fly, they did not return to the dish, but for a short time used to roost, with their heads nestling lovingly one over another, on the prongs of a rake which lay upon the rafters in the old stable. But soon I lost sight of them; for the old birds drove them out of the stable one evening, with a prodigious noise, and I never saw the brood there again. The cause of this ejectment

was manifested on the following day. My tenants, resolved to be house proprietors, had commenced building again, and their labors were crowned with success this time. I regret to state that they were not very honest; for materials, in the shape of a heap of bricklayer's mortar, lay conveniently near, and these they appropriated to their own purposes without compunction.

I had all the old scene over again; but the second brood consisted only of three, instead of five. In the early part of autumn, when the days began to shorten, my swallows intimated their wish to commence their labors earlier in the day, and made such a clatter that I was fain to slip on my dressing-gown, and come down every morning at four or five o'clock, to open the half-door and allow their egress. The watching of these little creatures beguiled many a weary hour, and when they migrated to other lands for the winter, I was sorry to lose my tenants, never supposing that I should see them again. But I was mistaken; for they are here now. They came back at the usual season, and this year have reversed operations; first rearing three young ones in a new nest; while at the very time that I write (July 24th, 1860), there are again five eggs towards a new "family pie" in the old cracked willow pattern dish, to which, or any other locality they may choose on my premises, I make them heartily welcome.

We cannot observe animate or inanimate nature in any shape, without feeling new reverence for Him who taught the swallow where to find "a house for herself." But the doings of my bonny pets seemed to give me a lesson of perseverance also, and to advise me, when circumstances sometimes prove adverse, that, as *they* contented themselves with the cracked pie-dish instead of a handsome specimen of swallow architecture, I, too, must endeavor to be satisfied with, and make the best of, those blessings which my Heavenly Father has placed within my reach.—*Leisure Hour.*

For the Children.

A LITTLE GERMAN STORY.

A countryman one day returning from the city, took home with him five of the finest peaches one could possibly desire to see; and as his children had never beheld the fruit before, they rejoiced over them exceedingly, calling them the fine apples with the rosy cheeks, and soft, plump-like skins. The father divided them among his four children, and retained one for their mother. In the evening, ere the children retired to their chamber, the father questioned them by asking—

"How did you like the soft rosy apples?"

"Very much, indeed, dear father," said the eldest boy; "it is a beautiful fruit—so acid, and yet so nice and soft to the taste; I have carefully preserved the stone, that I may cultivate a tree."

"Bright and bravely done," said the father, "that speaks well for regarding the future with care, and is becoming in a young husbandman."

"I have eaten mine and thrown the stone away," said the youngest, "besides which, mother gave me half of her's. O! it tasted so sweet, and so melting in my mouth."

"Indeed," answered the father, "thou hast not been prudent. However, it was very natural and childlike, and displays wisdom enough for your years."

"I have picked up the stone," said the second one, "which my little brother threw away, cracked, and eat the kernel—it was as sweet as a nut to the taste—but my peach I have sold for so much money, that when I go to the city, I can buy twelve of them."

The parent shook his head reprovingly, saying, "Beware, my boy, of avarice. Prudence is all very well, but such conduct as yours is unchildlike and unnatural. Heaven guard thee, my child, from the fate of a miser. And you, Edmund?" asked the father, turning to his third son, who frankly and openly replied.

"I have given my peach to the son of our neighbor—the sick George, who has had the fever. He would not take it, so I left it on his bed, and I have just come away."

"Now," said the father, "who has done the best with his peach?"

"Brother Edmund!" the three exclaimed aloud: "Brother Edmund!" Edmund was still and silent, and the mother kissed him with tears of joy in her eyes.

AGRICULTURAL RESOURCES OF THE SANDWICH ISLANDS.

The Sandwich Islands are destined ere long to occupy an important position as regards agriculture. It has been customary to assert that this tree or that vegetable could not grow, owing to the climate or soil, but we venture to say there is no more salubrious climate or better soil for the raising of many products, than is to be found among the Pacific Islands. The uplands are finely adapted for grazing and the production of wheat, while the lowlands produce luxuriant crops of coffee, sugar, cotton, cocoa, arrow-root, mulberries, yams, and sweet potatoes. In the year 1853, the latest of which we have any returns, the Sandwich Islands, after raising enough for their own consumption, exported 634,955 lbs. of sugar, 50,506 lbs. of coffee, 15,464 bushels of Irish potatoes, 8979 bushels of sweet potatoes, 16,462 lbs. of tallow, 10,824 lbs. of wool, and 3724 hogs, besides a large quantity of other products. A recent writer at the Islands, in referring to the rapid

development of their agricultural resources, remarks: "Well do we remember when an ear of Indian corn was a great rarity; but last week, on the road to Ewa, we saw more than twenty acres of as fine-looking Indian corn as ever grew in Massachusetts or Illinois. Who does not remember when it was said roses and flowers could not be raised in Honolulu? and now the most beautiful bouquets are gathered at all seasons. Strawberries and peaches even are becoming common upon the Islands. Only a few years since it was thought quite impossible to produce good butter, but now an article finds its way to our markets, vieing in quality with butter from Goshen, N. Y., and we hope that something in the way of cheese will soon be produced out-doing Cheshire. Why not? Our beef and mutton call forth even an Englishman's commendation.

ITEMS.

FOREIGN.

Elizabeth Barrett Browning died at Florence on the 29th of June, in the 53d year of her age. Beginning to write at an early age, in 1826 there appeared from her pen a volume entitled "An Essay on Mind, with other Poems." In 1833 she again appeared before the public in a volume entitled "Prometheus Bound, and other Poems." In 1838 appeared "The Seraphim, and other Poems." About the time of the publication of this volume Mrs. Browning's health became impaired by the rupture of a blood-vessel, and her condition was rendered even more critical by the subsequent death of a much-loved brother. For many years her life was that of a confirmed invalid. In the retirement of her sick-chamber she sought refreshment in the gravest studies, and from her pen there appeared in the London *Athenæum* a series of articles on the Greek Christian Poets. In 1844 the first collected edition of her works was published, and this was soon followed by her introduction to Mr. Browning, whose wife she became in the autumn of 1846. Since their marriage Mr. and Mrs. Browning have resided for the most part in Florence. "Aurora Leigh," her most important work, was published in 1856.

A brilliant comet was discovered in England between two and three o'clock on the morning of the 30th ultimo, its situation being due north. The nucleus is of great dimensions, and the tail is fully equal in extent to the famous comet of 1858.

The great fire in London continued to burn furiously in the vaults containing oil and tallow, and as water only aggravated the flames, the burning material had to be left to exhaust itself. The Sun and Phœnix Insurance Companies suffer to the extent of £325,000—over $1,000,000—each.

Dr. Rodet, of Lyons, France, who has for a long time devoted his attention to researches for an antidote to various animal poisons, as in glanders, syphilitic virus, &c., employs topically, a liquid containing perchloride of iron as a basis, which he has found very efficacious, as it destroys the virus after the bite of a rabid animal.

The Emperor of the French has recognized Victor Emmanuel as King of Italy.

DOMESTIC.

Virginia.—The New Government of Virginia is now in full operation, all the necessary officials having been selected and are now entered upon duty. The authority of the new Government is daily extending and being recognised—and in less than a month from this date it will remove its capital from Wheeling to Richmond!

Naval Expedition in China.—An American naval expedition sailed on the 27th March last, to ascend and explore the river Yang tse. The English have several times ascended the river to a distance of some hundreds of miles above the capital.

A Very Important Improvement.—The Pennsylvania Railroad Company is pushing rapidly forward the great work of constructing a new freight depot on the Delaware. The massive piers for their new bridge, over the Schuylkill, now rear their stony heads, far above the surface of the river, and ere long the superstructure will be put in place. Between Washington and Christian streets, and the Delaware and Swanson street, a large tract of land has been purchased, and it is now being cleared of buildings, preparatory to the erection of new structures for the use of the Company. It is expected to have erected, within the coming six months, a fire proof elevator, with the capacity of storing 475,000 bushels of grain. The Pennsylvania Railroad is already carrying grain in bulk; but a Delaware terminus, with an elevator, and direct steam communication to the banks of the river, were needed to complete the facilities for cheap and quick transportation.

Selected from the Scientific American.

Cotton in India.—Accounts from India state that England is building railroads into the interior, so that the cotton crop, very soon, can be moved as fast as it is produced to the sea shore; and the ship canal across the Isthmus of Suez, from the Red sea to the Mediterranean, shortening the distance 6,000 miles, will be finished in twelve months. It is said that if the American troubles continue five years, India will export 4,000,000 bales, rather a large figure, but there is no doubt that great efforts will be made in that country to supply English manufacturers independent of the United States.

California Academy of Sciences—Coal.—We learn from the *Mining and Scientific Press* (Cal.) that a meeting of the members of the above institution was held in San Francisco on the 15th of May, at which Professor Blake gave an interesting description of the coal regions of Monte Diabola, accompanied with specimens of the coal. The veins are rather thin, but the coal is good bituminous. The fossils of the region belong to the tertiary formations.

Professor Whitney is of opinion that the coal was formed from accumulations carried by eddies, and deposited in still water.

A considerable quantity of this coal has been taken to San Francisco, and it has tended to reduce the price of wood and the foreign coal. A plentiful supply of coal in California would tend greatly to facilitate quartz-mining, by enabling the machinery to be operated by cheap steam power. Coal, will also make California a great manufacturing State.

Instantaneous Photography.—Amongst the most notable photographs figuring in the present French Exhibition are some remarkable instantaneous pictures by Messers. Ferrier (father and sons) and Soulier. They are described by *Le Moniteur de la Photographie*, as the most perfect things of the kind ever produced; and from their subjects necessarily involve the condi-

tions of complete instantaneity to obtain any degree of success.

They consist chiefly of views of one of the most crowded Parisian thoroughfares, the Boulevard de Sebastopol. Not one of a thousand figures of all kinds, foot passengers and vehicles passing in all directions, shows the slightest sign of movement or imperfect definition. Figures standing in the shadows of porticoes are all perfectly rendered, although the exposure was but the imperceptible fraction of a second.

STEAMBOAT FOR AFRICAN TRAVEL.—Messrs. Todd & McGregor, of Glasgow, have lately launched a screw steam yacht of 110 tons burthen, built for Dr. Livingstone, the African traveller, intended for the navigation of the river Shire and the great Lake Nyassa, above the Falls. She is called the *Lady Nyassa;* is to have a pair of direct-acting high pressure engines; and when ready for sea will only draw 3½ feet of water. This steamboat is to be taken to the river Zambesi in pieces; therefore she has been built to be put together with screw bolts instead of rivets. She will be first tried on the river Clyde before being taken to pieces for shipment. It is only a few years since this great lake in Africa was discovered by white men; now it is about to become a scene for mercantile operations and steamboat enterprise. Such are some of the rapid changes which modern science and art effect.

PHILADELPHIA MARKETS.

FLOUR AND MEAL.—The Flour market is dull. There is little inquiry for export, and holders generally are free sellers, mostly to the trade, at $4 a 4 25 for North Western and superfine and extra $4 50 to 4 75 for Western Pennsylvania; small sales $4 75 a 5 50 for extras, and extra family, and $6 a 6 50 for fancy brands. Rye Flour is offered at $3 25 per barrel. Corn Meal is scarce, and quoted at $2 62 per barrel for Pennsylvania.

GRAIN.—There is not much Wheat offering, and the market is firm. A few small lots of Pennsylvania Western Red sold at $1 13 a 1 15. Old Western and Pennsylvania red is rather scarce, and held at $1 12 a 1 13, mostly in store. White ranges from $1 15 to 1 20. Rye is dull at 55 a 57 cents for Pennsylvania. Corn—Sales of prime Pennsylvania at 52 a 53c. in store. Mixed is quoted at 49 a 50 cents. Oats are dull—holders ask 30 cents for prime Pennsylvania afloat. No Southern offering.

HIGHLAND DELL BOARDING HOUSE.—This delightful retreat is situated on a spur of the Blue Mountains, overlooking the town of Stroudsburg, Pennsylvania, three miles from the Delaware Water Gap. The house has the conveniences of hot and cold water, stabling, &c. Board from $5 to $6 a week. Address

CHARLES FOULKE,
Stroudsburg, Monroe County, Pa.

Conveyances are always to be procured at Stroudsburg Station, to and from the Boarding House.
7th mo. 13.

FRIENDS' BOARDING HOUSE at the Sea Shore—Penn Cottage, Atlantic City, N. J. This favorite establishment is situated on the south side of Pennsylvania Avenue next below the Mansion House. Terms moderate. Visitors should leave the cars at the Mansion House. SUSAN M. KNIGHT,
7mo. 6. Proprietress.

I have just received a lot of SMALL PLAID INDIA SILKS. Also, FRENCH, in BLUE, BLCK, BROWN, GREEN and PURPLE. Tarlton MUSLIN, Stiff and Sheer. BOOK MUSLINS, all prices. BOOK MUSLIN HDKFS, nice assortment. Cashmere, Barcelona, Sarsnet and Crape Shawls. Crape Lise, Cap Crape and Bobinett. 50 doz. L. C. Hdkfs, at $1.50 per dozen. Nice assortment of Men and Boy's Cloths, Cassimeres and Vestings. Hosiery and Gloves in great variety. Plain Hand-made Mitts—choice colors. Plain Silk Gloves imported for Friends.

The above goods will be sold at the lowest market value, at JOHN H. STOKES,
Philada, 5th mo. 6th—6t 702 Arch St.

PERSONS desiring to visit Atlantic City, can find pleasant accomodations at Cedar Cottage, on Pennsylvania Avenue, between the railroad and beach. Terms, $8.00 per week.

GEORGE CHANDLEE.
7th mo. 6th.

UNDERTAKING.—WILLIAM HEACOCK, General Furnishing Undertaker, No. 18 North Ninth St., West Side, above Market, Philadelphia.

REFERENCES—Dillwyn Parrish, Samuel Perry, Joseph C. Turnpenny, Thomas B. Longstreth, George Peterson.
6 mo. 29th, 1861—6 m.

NOTICE.—Several colored Boys from 10 to 13 years of age, ready to be apprenticed in the country. Enquire at the Home for Destitute Colored Children in Maylandville, West Philadelphia, or to Rachel Wilson Moore, 313 Spruce Street, Philadelphia, or Passmore Williamson, S. W. corner of Arch and Seventh Streets. 6th mo. 22.

FRIENDS' HAT STORE. Silk, Beaver and Otter Hats, French and American Felts. Men's and Boy's Caps, Children's Hats and Caps.

STRAW GOODS in great variety. Hats made to order at short notice.

CHAS. LAING & CO.,
N. E. cor. Sixth and Chestnut Sts.,
AMOS J. MICHENER. Philada.
4th mo. 6th, 1y.

GEORGE A. NEWBOLD, having obtained a good location near Norristown, expects to open a select school for Young Men and Boys, the 15th of next Ninth mo.

The number will be limited to 25. For circulars direct to him, Norristown P. O. Montgomery County, Pennsylvania.

N. B.—A few Summer Boarders can be accommodated. Any wishing a pleasant retreat for the summer, please address as above.
6th mo. 8.

OSWEGO VILLAGE SCHOOL, N. Y.
AMY DRURY, Principal.

This Boarding School will open its Summer Session on the 9th of 5th Month, and continue twenty weeks, as a School for Young Ladies.

Competent teachers will be employed. Drawing and Painting will be taught.

Terms, $60 per Session of twenty weeks, half payable in advance, the remainder at the middle of the term.

Drawing and Painting extra.

ANDREW A. SKIDMORE, Proprietor.

REFERENCES. Alfred Moore, Oswegoburg, John D. Wright, Poughkeepsie, N. Y. 4th mo. 13, 1861.

Merrihew & Thompson, Prs., Lodge st.